

## CLAIMS

1. A method for recycling used heat-resistant and high-performance spun yarn products, characterized in that used  
5 heat-resistant and high-performance spun yarn products are washed in advance at request and undergo crushing processes, a crushed material thus obtained is opened to become a cotton-like material, and the cotton-like material is spun for recycling the spun yarn.

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2. The method for recycling used heat-resistant and high-performance spun yarn products as claimed in Claim 1, wherein unused discontinuous fiber having a length of 30 to 200 mm is intermixed at a ratio of 10 to 90% of the total prior to  
15 or at the time of spinning.

3. The method for recycling used heat-resistant and high-performance spun yarn products as claimed in Claim 1 or 2, wherein the heat-resistant and high-performance spun yarn  
20 is comprised of one or more types of fiber selected from the group consisting of wholly aromatic polyamide fiber, wholly aromatic polyester fiber and polyparaphenylene benzobisoxazole fiber.

25 4. The method for recycling used heat-resistant and high-performance spun yarn products as claimed in Claims 1 to 3, wherein the used heat-resistant and high-performance spun yarn product is a safeguard wear and a working glove.

5. The method for recycling used heat-resistant and high-performance spun yarn products as claimed in Claims 1 to 4, wherein the cotton-like material contains discontinuous fiber having a length of not less than 20 mm by not less than 50% and/or contains discontinuous fiber having a length that corresponds to not less than 40% of a length of a discontinuous fiber of spun yarn employed in the heat-resistant and high-performance spun yarn product.

6. A recycled heat-resistant and high-performance spun yarn that is obtained by the method for recycling used heat-resistant and high-performance spun yarn products as claimed in Claims 1 to 5.

7. A recycled heat-resistant and high-performance spun yarn, wherein the spun yarn contains not less than 20% of discontinuous fiber having a length of not less than 20 mm.

8. A fiber product containing the recycled heat-resistant and high-performance spun yarn as claimed in Claim 6 or 7.

9. The fiber product as claimed in Claim 8, wherein the product is a braid, a textile, knittings, a rope, a cord, a packing material, a safeguard wear or a working glove.

10. The fiber product as claimed in Claim 8 or 9, wherein it is indicated on the product that it contains recycled heat-resistant and high-performance spun yarn.

11. The fiber product as claimed in Claim 10, wherein a number of recycling times of the recycled heat-resistant and high-performance spun yarn is further indicated.